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January 19, 1994

Mr. Jerry North Interstate Brick Company 9780 S. 5200 W. West Jordan, Utah 84088

Re: Review of Five Mile Mine Permit Amendment, Interstate Brick Company (IBC).

M/045/006, Tooele County, Utah,

Dear Mr. North:

The Division has completed a review of your draft amendment submission received January 10, 1994, and supplemental information received January 12, 1994. After reviewing the information, the Division has the following comments which will need to be addressed before approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion.

# R647-4-104 - Operator(s), Surface and Mineral Owner(s)

The amendment indicates that Interstate Brick is the surface owner of the property to be mined. The minerals rights sections was left unanswered. Please provide the mineral rights information to complete this section.

## R647-4-105 - Maps, Drawings & Photographs

## 105.2.11 and .12 - Proposed surface facilities, Border outlining Acreage

Please provide an up to date topographic base map of the mine site showing the following features: property boundaries of surface & mineral ownership, pre-law mining disturbances, pre-law mining disturbances re-impacted by IBC, post-law mining disturbances created by IBC, previously existing roads, new roads created by IBC. topsoil stockpiles, wasterock piles, and proposed disturbance for this amendment. This map should include a border clearly indicating the acreage disturbed and proposed to be disturbed by IBC's mining operations. Please label any mining features shown on this map such as pits, stockpiles, topsoil stockpiles, wasterock, etc. (AAG)



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Please indicate on the base map where topsoil salvaged from the amendment area will be placed. (TWJ)

## R647-4-106 - Operation Plan

## 106.2 - Type of Operation Conducted

The amendment submission states that mining in the new area will follow the mine plan in the existing NOI. More specifically, this means: salvaging topsoil, stockpiling topsoil, drilling and blasting the overburden, placing overburden into an existing pit as backfill, removing clay, regrading any pit slopes to a 1:1 angle or less, regrading any dump slopes to an angle of 2:1 or less, replacing topsoil onto regraded areas, and reseeding all disturbed areas. Please confirm this interpretation. (AAG)

#### 106.3 - Estimated acreage

The submission states that the area of disturbance for this amendment will be 20 acres or less. Please provide a border on the base map describing the area to be disturbed. If this amendment will be conducted/developed in phases, please indicate the approximate disturbance for each phase. (AAG)

## 106.4 - Nature of materials including waste/overburden and estimated tonnage

What is the anticipated amount, in cubic yards, of limestone/overburden to be removed from the new pit/disturbed area? (TWJ)

It is our understanding that the existing mined-out pits may be backfilled with this material. Please indicate the proposed location for placement of the limestone/overburden on the base map. (AAG)

#### 106.6 - Plan for protecting and redepositing existing soils

Please provide an estimate of the amount of topsoil to be salvaged from the amendment area. Please explain how stockpiled topsoil materials will be protected during the interim time period between storage and reapplication. (TWJ)

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## 106.7 - Existing vegetative communities to establish revegetation success

It is our understanding that IBC has performed an extensive photographic survey of the area to be disturbed under this amendment to document the preexisting vegetative cover and species. Please forward this information to the Division which will be used to supplement the information already contained in the approved mine plan for the general area. (DWH)

## 106.8 - Depth to groundwater, overburden material & geologic setting

Based upon previous information in the approved mine plan, the Division is assuming that no groundwater is anticipated to be intercepted or impacted as a result of the mine development proposed under this permit amendment. Please confirm this assumption and provide any supporting justication in this regard. (DWH)

# 106.9 - Location and size of ore and waste stockpiles, tailings and treatment ponds

Will additional waste stockpiles/dumps be generated, or will all waste be placed in the adjacent mined-out pits. (TWJ)

## R647-4-107 - Operation Practices

#### 107.1.14 - Public safety and welfare, warning signs

Warning signs should be posted in the immediate vicinity of the pit(s) and where the public may have general access to the mine area. (DWH)

#### 107.1.15 - Construction of berms, fences, barriers

Depending on the extent and depth of the clay pit it may be necessary to berm or fence the perimeter of the pit during operations to prevent/minimize hazards to the public. If the highwalls are not excessively steep or accessible to the public, it may not be necessary to construct these forms of barriers. Without more detailed information regarding ultimate pit depth, highwall steepness and public access, the Division cannot make an adequate assessment of the need for these protection measures. Please provide us with supplemental information to assist us in making this determination. (TWJ)

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## 107.2 and 107.3 - Minimization of Damage to Drainages and Erosion Control

Will it be necessary to implement runoff control measures on the new disturbed area? It is necessary to insure that disturbed area drainage does not impact natural drainage ways, or does not commingle with natural drainage unless first treated (i.e. passed through straw bales or silt fence) especially in areas where runoff will directly impact an intermittent or perennial stream. (TWJ)

#### 107.5 - Suitable soils removed & stored

Please identify the areas where topsoil will be salvaged. How will it be stripped and where will it be stockpiled? As stated earlier, stockpile areas should be indicated on the base map(s). (TWJ)

## R647-4-109 - Impact Assessment

## 109.1 - Surface & groundwater systems

Is the operator aware of any surface or groundwater impacts that could arise from this mining operation? As requested under R647-4-106.8 above, please confirm the depth to groundwater in the area to be mined and indicate any anticipated mining-related impacts. If surface or groundwater impacts are probable, mitigation measures must be included as part of the application. (TWJ/DWH)

## 109.3 - Existing soil and plant resources

Explain how the operation might alter existing soil and plant resources in the area to be affected. Will these values be rehabilitated/mitigated or will the operation result in permanent impacts? (TWJ)

## 109.5 - Actions proposed to mitigate any of the above impacts

The operator must address this section if impacts to the above categories will occur. (TWJ)

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#### R647-4-110 - Reclamation Plan

## 110.1 - Current land use and postmining landuse

The Division assumes that the current and postmining landuse(s) will remain the same as outlined in the existing approved mining and reclamation plan for the 5 Mile mine. Please advise if this is not the case. (DWH)

# 110.2 - Roads, highwalls, slopes, leach pads, impoundments, drainages, pits, trenches, ponds, drill holes, etc. will be reclaimed

Please explain your backfilling and grading plan in relation to the pit/quarry. What will be the final configuration of the regraded highwalls or slopes?

Overall highwall angle can be no more than 45 degrees at final reclamation. All dump or fill slopes must be 3:1 or less. Anything over a 3:1 slope must use state-of-the-art surface stabilization technology.

Pit benches should be topsoiled, or covered with fines, and revegetated unless a revegetation variance is requested by the operator and approved by the Division. (TWJ/DWH)

#### 110.3 - Surface facilities to be left

We are assuming that there will not be any surface facilities left on-site after reclamation of the disturbed areas. If otherwise, please advise us accordingly, and provide justification, in the plan, for not reclaiming these facilities. (TWJ)

#### 110.5 - Revegetation planting program and topsoil redistribution

Please describe your revegetation plan for the new area in more detail. The amendment simply states that reclamation activities will follow the existing NOI. Please restate or reference by page #, chapter and section, those portions of the plan for clarification. For example will ripping, mulching, fertilizing, seeding and scarifying of these areas be performed, and if so, how will this be accomplished? What depth of topsoil will be applied, and what type of amendments might be applied to the topsoil? Is the seed/species mixture and amount of application for the new area the same as that which will be applied to the old area? (TWJ)

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#### R647-4-111 - Reclamation Practices

#### 111.3 - Erosion control - sediment

Please describe the methods to be used to keep sediment out of stream channels and to keep soil materials from eroding off of the reclaimed areas. (TWJ)

#### R647-4-112 - Variance

No variances were requested for the amendment area. (AAG)

## R647-4-113 - Surety

Please provide a reclamation estimate for the amendment area to the Division. (TWJ)

The Division will suspend further review of the Five Mile Mine Amendment until your response to this letter is received. Please be advised that you may need approval from other local, state or federal agencies before starting this project amendment. If you have any questions in this regard please contact me, Tony Gallegos, or Travis Jones of the Minerals Staff. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg Permit Supervisor

Minerals Reclamation Program

jb cc:

State Lands & Forestry
Utah and Tooele County
Lowell Braxton, DOGM

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